Management of Sixgill Sharks in British Columbia and Washington

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In recent years there has been sporadic interest in harvest of sixgill sharks (*Hexanchus griseus)* in both British Columbia and Washington. This presentation reviewed recent fisheries, related research and current regulations for the harvest of sixgill sharks in British Columbia and Washington State.

British Columbia[1]

Licenses to commercially harvest sixgill were first offered in 1983. During 1991, biological data were collected on 13 sixgills of which only three were sexually mature. There were increased landings between 1991-93. Catch rates were 14 sharks per day with an average size of 200 to 300 each. In 1993, the commercial harvest of sixgills was closed. In 1994 an experimental fishery for sixgills was authorized along with a biological sampling study. During this study, 285 sharks were caught. Of these, 202 were tagged and released. Four of these sharks were recaptured during the same year with movements if 0, 4, 8 and 19 km in approximately three months. All but one of the sharks caught in the study was sexually immature.

Because of the very high proportion of immature fish in the catches, the fishery was closed and the study terminated during the fall of 1994. In addition, sportfishing regulations were changed to prohibit the retention of any sixgill shark caught by recreational fishing.

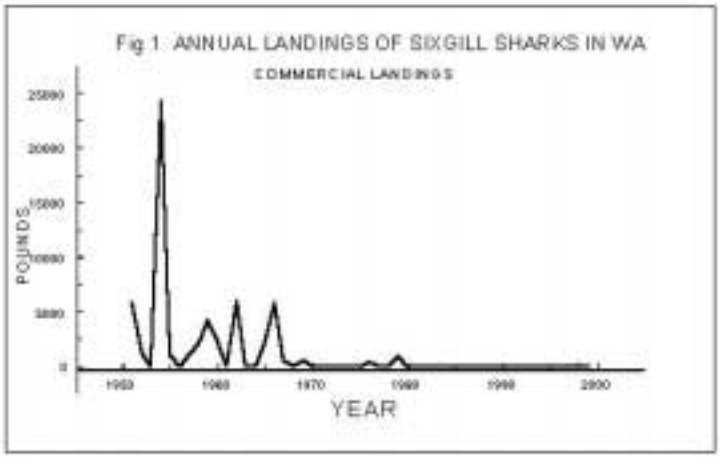
At present, there is a no-retention policy for sixgill sharks coastwide in British Columbia. Any new fisheries for sixgills would require a phased, precautionary approach to management prior to implementation.

Washington State

At present, there are no restrictions on the commercial harvest of sixgills in Washington waters. The fishing season is open all year round and there are no limits on the pounds of sixgills that may be landed. However, the landings of sixgill sharks remain low, with virtually no landings since 1970 (Figure 1). The only commercial harvest at present occurs as bycatch in fisheries for other species. During the 1940s and very early 1950's there was an unquantified harvest of sixgill sharks in Puget Sound. During those years, there was a fishery for fish livers with a large proportion of the landings recorded as "shark liver". While no species composition of the landings was made, conversations with participants in the liver fishery indicated that sixgill sharks were a regular component of the landings.

Sixgills occurred very rarely in the recreational fishery until the summer of 2000. During early August of 2000, a directed recreational fishery for sixgills developed in Elliott Bay along the Seattle waterfront. During a week's time, recreational anglers in Elliott Bay caught at least four sixgill sharks. This fishery received a lot of publicity and interest in harvesting sixgill sharks seemed to be increasing rapidly. In addition the Seattle Aquarium and local divers expressed concern about the impact of the harvest on the local populations of sixgills and on the opportunities for divers to observe these fish underwater.

[1] Based on material supplied by Rick Harbo, Sr. Biologist, Fish and Oceans Canada



Because of the lack of information on the abundance and biology of sixgill sharks and the prospect of a rapidly developing fishery, on August 14, 2000 the Department of Fish and Wildlife issued an emergency rule which temporally prohibited the retention of sixgill sharks caught by recreational angling anywhere in Puget Sound.

At present the Fish and Wildlife Commission is considering a proposal by agency staff, which would establish a permanent rule prohibiting the retention of recreationally caught sixgill sharks in Puget Sound. Agency staff is also developing proposals, which would prohibit the retention of sixgill sharks caught by commercial fishing operations.

As with British Columbia, Washington is managing the sixgill shark resource on a precautionary basis. The first step before allowing harvest would be to gather biological data on sixgill sharks and examine shark fisheries throughout the world.